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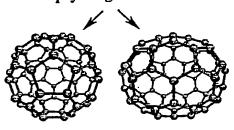
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(54) Title: A(3-n)XnN@C80 ENDOHEDRAL METALLOFULLERENES AS LUBRICANT OF ADDITIVE, CORROSION-RE-SISTANT COATING, AND THERMALLY-CONDUCTIVE MATERIALS.

### **Empty Cage Fullerenes**



 $C_{60}(I_h)$ 

 $C_{70} (D_{5h})$ 

(57) Abstract: A <sub>3-n</sub>X <sub>n</sub>N@C <sub>80</sub> endohedral metallofullerenes used as or in lubricant, lubricant additive, corrosion-resistant, and thermally conductive materials are disclosed. Methods of making and using are provided.

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